

09/735,256

1. (Previously Presented) A system for predicting semiconductor product costs at a fabricator comprising:
  - a storage medium including a database of historical critical gate dimensions and historical critical groundrules correlated to cost functions at said fabricator;
  - a user interface having user inputs for new design parameters and new critical groundrules associated with a new device to be produced at said fabricator; and
  - a computer adapted to:
    - receive said user inputs;
    - perform a regression analysis on historical costs of historical critical gate dimensions at said fabricator, using said historical critical gate dimensions as independent variables and said historical costs as dependent variables;
    - create, in said database, models from said regression analysis only showing a relationship between said historical critical gate dimensions and said historical costs;
    - input new design parameters and new critical gate dimensions of a new device into said database; and
    - predict product costs of said new device based on said models.
2. (Previously Presented) The system in claim 1, wherein said historical critical gate dimensions and said new critical gate dimensions comprise gate dimensions.
3. (Previously Presented) The system in claim 1, wherein said new critical gate dimensions are smaller than said historical critical gate dimensions.
4. (Previously Presented) The system in claim 1, wherein said new device comprises a technology generation that is yet to be developed.

09/735,256

5. (Previously Presented) The system in claim 4, wherein fabrication hardware and fabrication methods for producing said technology generation are unknown.
6. (Previously Presented) The system in claim 1, wherein said models comprise base models and models that include options.
7. (Previously Presented) The system in claim 1, wherein said models comprise models that illustrate that costs increase exponentially as said historical critical gate dimensions and said historical critical groundrules are reduced.
8. (Previously Presented) A method of predicting semiconductor product costs comprising:  
performing a regression analysis on historical costs of historical critical gate dimensions at a fabricator, using said historical critical gate dimensions as independent variables and said historical costs as dependent variables;  
creating, in a database, models from said regression analysis only showing a relationship between said historical critical gate dimensions and said historical costs;  
inputting new design parameters and new critical gate dimensions of a new device into said database; and  
predicting product costs of said new device based on said models.
9. (Previously Presented) The method in claim 8, wherein said historical critical gate dimensions and said new critical gate dimensions comprise gate dimensions.
10. (Previously Presented) The method in claim 8, wherein said new critical gate dimensions are smaller than said historical critical gate dimensions.

09/735,256

11. (Previously Presented) The method in claim 8, wherein said new device comprises a technology generation that is yet to be developed.
12. (Previously Presented) The method in claim 11, wherein fabrication hardware and fabrication methods for producing said technology generation are unknown.
13. (Previously Presented) The method in claim 8, wherein said models include base models and models that include options.
14. (Previously Presented) The method in claim 8, wherein said models illustrate that costs increase exponentially as said historical critical gate dimensions and said historical groundrules are reduced.
15. (Previously Presented) A system for predicting semiconductor product costs at a fabricator comprising:
  - a regression analyzer adapted to only determine relationships between historical critical gate dimensions of historical technologies and costs of said historical technologies;
  - a user interface for inputting a new critical dimension of a new technology; and
  - a calculator for predicting a cost of said new technology based only on said new critical gate dimension and said relationships.
16. (Previously Presented) The system in claim 15, wherein said historical critical gate dimensions and said new critical gate dimensions comprise gate dimensions.
17. (Previously Presented) The system in claim 15, wherein said new critical gate dimensions are smaller than said historical critical gate dimensions.

09/735,256

18. (Original) The system in claim 15, further comprising a storage unit adapted to store a database of said relationships.
19. (Previously Presented) The system in claim 15, wherein said new device comprises a technology generation that is yet to be developed.
20. (Previously Presented) The method in claim 19, wherein fabrication hardware and fabrication methods for producing said technology generation are unknown.
21. (Previously Presented) A computer program product readable by a computer including a computer program for performing a method of predicting semiconductor product costs, said method comprising:
- performing a regression analysis on historical costs of historical critical gate dimensions at a fabricator, using said historical critical gate dimensions as independent variables and said historical costs as dependent variables;
  - creating, in a database, models from said regression analysis only showing a relationship between said historical critical gate dimensions and said historical costs;
  - inputting new design parameters and new critical gate dimensions of a new device into said database; and
  - predicting product costs of said new device based on said models.
22. (Previously Presented) The computer program product in claim 21, wherein said historical critical gate dimensions and said new critical gate dimensions comprise gate dimensions.
23. (Previously Presented) The computer program product in claim 21, wherein said new critical gate dimensions are smaller than said historical critical gate dimensions.

09/735,256

24. (Previously Presented) The computer program product in claim 21, wherein said new device comprises a technology generation that is yet to be developed.
25. (Previously Presented) The computer program product in claim 24, wherein fabrication hardware and fabrication computer program products for producing said technology generation are unknown.
26. (Original) The computer program product in claim 21, wherein said models include base models and models that include options.
27. (Currently Amended) The computer program product in claim 21, wherein said models illustrate that costs increase exponentially as said historical critical gate dimensions are reduced.